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|--|-------------|-------------------------|---------------------|------------------|
| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/470,343   | 12/22/1999  | Bernardo Martinez-Tovar | P-1583              | 6032             |
| 23413  | 7590        | 05/04/2006              | EXAMINER            |                  |
| CANTOR COLBURN, LLP<br>55 GRIFFIN ROAD SOUTH<br>BLOOMFIELD, CT 06002 |             |                         | CHAMBERS, TROY      |                  |
|  |             |                         | ART UNIT            | PAPER NUMBER     |
|  |             |                         | 3641                |                  |
| DATE MAILED: 05/04/2006  |             |                         |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                       |  |
|------------------------------|-------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>09/470,343 | Applicant(s)<br>MARTINEZ-TOVAR ET AL. |  |
|                              | Examiner<br>Troy Chambers     | Art Unit<br>3641                      |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-9, 11, 15, 16, 35-37 and 40-58 is/are pending in the application.
- 4a) Of the above claim(s) 1-4, 6-9, 11, 15, 16, 35-37, 40-52 and 54-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

***Election/Restrictions***

1. Claims 1-4, 6-9, 11, 15, 16, 35-37, 40-52 and 54-58 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention/species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 04/06/06.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benson in view of US 6133146 issued to Martinez-Tovar (hereinafter "Tovar") and in further view of DE4222223 issued to Brede.

4. With respect to claim 53 Benson discloses a semiconductor bridge igniter comprising: a substrate 12, 18; a tungsten clad bridge structure 16 as shown in Fig. 1; and, a pair of lands 14. Benson discloses vaporizing the tungsten and silicon layer. Benson does not disclose a bridge structure comprising titanium.

5. Tovar discloses the advantages and disadvantages of using titanium and tungsten, respectively, as the bridge layer metal directly in contact with the semiconductor material. (Tovar, col. 8, line 51 to col. 9, line 14).

6. Brede discloses an electrical igniter having an insulating layer 114 and a bridge 132 connecting two pads 128, 130. The bridge layer is made of titanium. Using applicant's translation of DE4222223, Brede touts the benefits of using titanium as a bridge metal over other known bridge metals. (Brede translation, pgs. SCB-0006 to SCPB-0007.

7. At the time of the invention, one having ordinary skill in the art would have found it obvious to replace the tungsten bridge of Benson with the titanium bridge of Brede. The suggestion/motivation for doing so would have been to avoid the temperature-sensitive issues of using tungsten as disclosed by Tovar and obtain the heat conductivity properties of titanium as disclosed by Brede.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1 and 36<sup>1</sup> have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

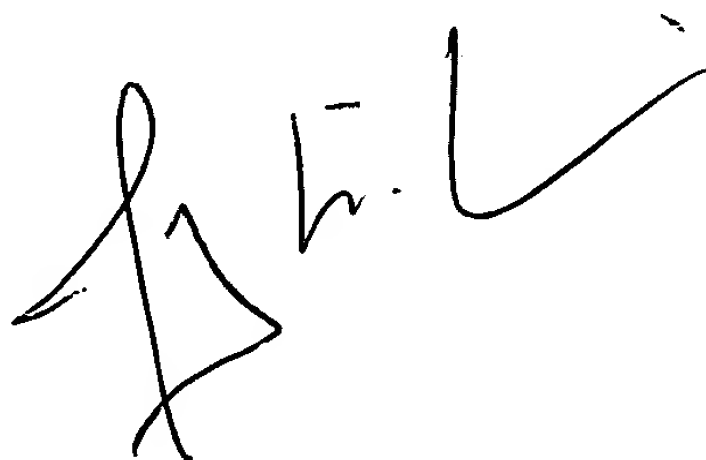
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Troy Chambers whose telephone number is (571) 272-6874 between the hours of 7:00 a.m. to 3:30 p.m., M-F. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone, can be reached at (571) 272-6873.

Troy Chambers  
Primary Examiner  
Art Unit 3641

A handwritten signature in black ink, appearing to be 'T. Chambers', written over the printed name of the examiner.

TC  
01 May 2006

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<sup>1</sup> Applicant appears to suggest that the arguments applicable to withdrawn claims 1 and 36 are equally

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